TTMA

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June 5, 2003

Mr. Robert McGuire
Associate Administrator for Hazardous Materials
Dockets Management Systems
U.S. Department of Transportation
Room PL-401
400 7th Street SW
Washington, DC 20590-0001

RE: Docket Number RSPA-99-6223 (HM-213B)

Dear Mr. McGuire:

The Truck Trailer Manufacturers Association (TTMA) is an international trade association representing approximately 90% of the trailers manufactured in the United States. TTMA offers the following comments concerning the above Docket Number on Wet Lines.

You have asked for commenters to answer questions in the following categories:

A. General
B. Current Market Practices
C. Facility Modification
D. Alternatives

Some of the questions in the categories are not directed to the manufacturers of cargo tank trailers, but rather the carriers and distributors or to manufacturers of other types of cargo tank motor vehicles. We will not attempt to answer these, but limit our answers to the questions that will affect the manufacturing process of cargo tank trailers and allow other associations such as NTTC and API to comment using their expertise.

A. GENERAL

1. ***Are the statistics and data (e.g., cargo tank population, useful life of a cargo tank, accident frequency and consequences), costs (e.g., purging system, short-loading lines, new construction retrofit), and potential benefits (e.g., Fatalities, injuries, and property damages prevented) provided in this ANPRM accurate?***

   The population may be overstated, with approximately 1500 cargo tank trailer units manufactured per year that would amount to about 40,000 total.

2. ***What is the useful life of a cargo tank motor vehicle utilized for the transportation of flammable liquids?***

   Our experience on useful life of a cargo tank trailer is that around 7 years of age you reach maximum trade value for the years of service, with a 15-year max life. At 15 years basically everything attached must be upgraded. We do feel that the cost shown in the notice is underestimated.

3. ***What percentage of cargo tanks motor vehicles are operated at maximum weight limits such that any additional weight of a system to eliminate wetlines would impose a weight penalty?***

   All units are designed to be loaded to the maximum weight limit, and economic incentives are to operate as close to that weight as possible.

4. ***For cargo tank motor vehicles in flammable liquid service, what is the average distance per trip?***

   We will not attempt to answer this question but rather allow NTTC to follow up on this.

5. ***In addition to the potential benefits described in this ANPRM are there additional benefits, measurable or otherwise, that would result from implementation of measures to reduce wetlines risks?***

   We are aware of no proven additional benefits from either a purging or short line system.

6. ***Should a benefit-cost analysis include the reduction of risk associated with low-frequency, high-consequence events?***

   Benefit-cost analysis should be examined carefully. The likelihood of a wet lines accident is rare in and of itself, and the likelihood of an accident occurring again and destroying an overpass, such as in the Yonkers, New York, event is even more rare and is impossible to predict with any degree of reliability. So that any regulation will be based on reliable cost-benefit analysis and not speculation about extreme events, low-frequency events of high-consequence such as this should not be included.

7. ***Would requirements for systems to reduce the risk posed by wetlines for all newly constructed cargo tank motor vehicles result in significant reductions in per unit cost because of economies of scale?***

   No, we believe that the components are priced as we will see them in a production environment. The installation of these systems is very labor intensive.

B. CURRENT MARKET PRACTICES

1. ***What safety practices, other than those described in this ANPRM, are motor carriers currently utilizing to reduce the risk associated with the transportation of flammable liquid in wetlines?***

   Lights and conspicuity equipment.

2. ***How effective are these safety practices in reducing the risks associated with wetlines on cargo tanks?***

   See NHTSA Technical Report dated March 2001 DOT HS 809 222, entitled "The Effectiveness of Retroreflective Tape on Heavy Trailers," and Comments to NHTSA Docket 2001-9318.

3. ***What are the costs of these safety practices currently utilized?***

   Approximately 10% of the cost estimated for the wetlines systems.

4. ***Would an industry or industry/government sponsored research initiative to explore new methods to eliminate wetlines be of value?***

   Yes, an industry study will bring focus to the issue from every segment of the industry as well as heighten public awareness of the situation.

5. ***If so, what would be the value of such a partnership?***

   Identify the potential solutions and their respective costs.

C. FACILITY MODIFICATION

1. ***Concerning the short and recessed loading lines systems described in this ANPRM, what modification to loading arms or hoses at existing loading racks would be necessary to accommodate short, including recessed within the cargo tank wall, loading lines?***

   Additional loading arms will be required. The difficulty will be in modifying the racks without shutting them down for installation.

2. ***What would be the cost of these modifications?***

   TTMA cannot estimate the cost of these modifications. That would better be answered by API.

3. ***Can loading rack fuel tax accounting systems be modified to allow for product reversal once the cargo tank is full and the internal valves are closed, thus draining the loading lines?***

   TTMA believes that the metering device can be programmed to run in reverse. The problem will be the fuel with additives going back into the storage tank. Not every customer is taking the same mix.

4. ***Is this option viable?***

   Yes. This would be a viable option and if completed on each loading rack, would prevent wet lines on every trailer on the road.

Facility Modification - continued…

5. What would such a modification cost?

TTMA is not able to answer this question with any accuracy, we will leave this to those that have better expertise in meters.

D. ALTERNATIVES

Independent Loading Lines

1. Are the short and recessed loading lines options practicable for installation on new cargo tank motor vehicles?

Yes. Short loading lines are practicable for new cargo tanks.

2. Are either of these options practicable for installation on existing cargo tank motor vehicles (i.e., Retrofit)?

Yes. Both options are practicable for installation on existing cargo tanks.

3. Are there any motor carriers actively operating or contemplating operating cargo tank motor vehicles with such a design?

TTMA is not aware of any motor carriers operating this type of system.

4. If so, what configuration was utilized and what was the cost to modify the cargo tank?

This cannot be answered because no one has done this type of modification.

5. Would maintaining a vehicle with such a design (i.e., independent loading lines) result in higher or lower costs than currently utilized designs?

The maintenance cost would not be affected if a cargo tank had this type of system.

Purging Systems

1. How effective is a purging system in reducing the risks posed by wetlines?

When current purging systems have completed removal of all liquid, risk remains due to the remaining vapors in the loading lines. Without assessing that risk, the effectiveness of purging systems cannot be determined.

2. Is a purging system practicable for installation on new cargo tank motor vehicles?

The installation on new cargo tanks is feasible.

3. Is a purging system practicable for installation on existing cargo tank motor vehicles (i.e., retrofit)?

Yes. Installation in existing cargo tanks is possible but expensive and dangerous. The tanks must be absolutely clean and vapor free because of the welding required to retrofit.

4. Are there any motor carriers actively operating or contemplating operating cargo tank motor vehicles with a purging system?

Yes. A few companies have installed them.

Purging Systems - continued…

5. ***If so, what configuration is utilized (automatic, manual, other) and what was the cost to modify the cargo tank?***

   An automatic system was installed by the motor carrier at its location. TTMA is not aware of the final cost for installation.

6. ***What are the costs to maintain a cargo tank motor vehicle with a purging system installed?***

   TTMA does not have access to any of the maintenance records of a wet lines purging system. This question would be better answered by a motor carrier.

Conspicuity

Questions on conspicuity are addressed, in part, in the NHTSA study:

DOT HS 809 222 – NHTSA Technical Report (March 2001)
"The Effectiveness of Retroreflective Tape on Heavy Trailers"
This study covered heavy trailers of all types involved in crashes in 1997-1999 reported in Florida and Pennsylvania. The effectiveness of retroreflective tape on tank trailers is not separately analyzed. See also comments to NHTSA Docket 2001-9318.

Accident Damage Protection

1. ***Are there cost-effective designs for accident damage or underride protection (e.g., guards), specification or otherwise, that would reduce the risks posed by unprotected piping?***

   The European and United Kingdom markets are currently installing some side protection devices pursuant to regulations designed for cyclist/ pedestrian impacts. A few domestic cargo tank trailer manufacturers have installed similar devices per customer request. The cost-effectiveness of these devices has not been shown. TTMA has insufficient data to question NHTSA's previous determination that side underride guards for vehicle impacts are not cost-effective. See Docket No. 1-11; Notice 09, Comment 002, December 30, 1991, Preliminary Regulation Evaluation, Combination Truck Rear Underride Guards, New FMVSS, September, 1991, pp. 14-15.

2. ***What would these designs cost?***

   There is not enough data available to answer this question with any degree of accuracy.

3. ***What level of protection (i.e., impact forces sustained) would be both cost-effective and provide a significant reduction in risk associated with wetlines?***

   There is not enough data available to answer this question with any degree of accuracy.

Non-Regulatory

1. ***Would a non-regulatory approach, such as an awareness campaign to alert the public as to the hazards posed by wetlines, be successful in helping to reduce the risk posed by wetlines?***
   TTMA has insufficient experience in human factor engineering to comment.

Other

1. ***In addition to the purging and short-line systems described in this ANPRM, are there other systems currently being marketed or in development that can evacuate wetlines after loading or prevent wetlines from retaining liquid loading operations?***
   TTMA is not aware of any other systems on the market at this time.

Questions 2-4:

Cannot be answered because as stated in question 1, TTMA is not aware of any system under development at this time.

5. ***Are there other concepts, either related to vehicles or facilities, that might have application in reducing the risks posed by wetlines?***
   Yes. Consider a robotically operated top loading system that could be controlled from the ground. Loading racks could be set up with guarded grating walkways that could be lowered and raised to accommodate the loading and departure phase of the cargo tank at the loading rack. The top loading unit could be equipped with vapor recovery equipment to negate the problem of escaping vapors.

In closing TTMA would like to add that there has been very little discussion on loading rack re-configuration. This seems a viable option but needs more exploration. Even in this ANPRM most of the discussion was centered on the cargo tanks, because that is where these rare events occur. However, prevention of wet lines can be done at the loading rack. Loading rack re-configuration would be less costly and more effective as it would affect every trailer loaded. There are fewer loading racks across the country than trailers, and reconfiguration would take less time to complete. The benefit-cost analysis surely would be more favorable to take that approach.

With kind regards,

Jeff Sims

Jeff Sims
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